AMENDMENT TO THE SPECIFICATION

Please replace the paragraph at page 3, lines 7-18 with the following amended paragraph:

The assignee of the present invention has developed a technique for sensing the temperature state of a memory array and preventing a write and/or read operation to the memory array when the temperature of the memory array reaches a threshold temperature. This technique is described in "Memory Device and Method for Temperature-Based Control over Write and/or Read Operations," U.S. patent application serial no. 09/944,613 ——— (attorney docket no. 10519/22; MD-54), which is being filed on the same day as the present application and is hereby incorporated by reference. By preventing write and/or read operations only when the memory array is too hot, this technique avoids thermal run-away in worst-case memory arrays while maintaining a high data rate in typical memory arrays. While useful in many applications, this technique can result in a relatively low data rate in applications where write and/or read operations are frequently interrupted due to high operating temperatures.

Please replace the paragraph at page 8, line 15 – page 9, line 7 with the following amended paragraph:

In the examples above, the input to the mode register was provided by a source external to the memory device (*e.g.,* by a host device, user, or tester). In another embodiment, the input to the mode register is provided by a source internal to the memory device. For example, as shown in Figure 4, the input to the mode register 430 can be the output of temperature-based control circuitry internal to the memory device. In operation, a temperature sensor 450 senses the temperature of the memory array 400, and a comparator 460 compares the output of the temperature sensor 450 (V_{out}) to a reference voltage from a reference voltage source 470 (V_{ref}). When the temperature of the memory array 400 reaches a threshold temperature, the comparator 460 provides an input to the mode register 430 to decrease the value in the mode register 430 to the next fewer number of selected sub-array groups. In one preferred embodiment, after the comparator 460 decreases the value in the mode register 430, at least one more write operation is permitted. If the temperature still exceeds the threshold temperature, an additional decrease occurs with each initiation of a block write operation. Decreasing the value in the mode register 430 below the lowest number of sub-array groups preferably activates the signal that prevents the start of a block write operation, as described in "Memory Device and Method for Temperature-Based Control over Write and/or Read Operations," U.S. patent application serial no. 09/944,613 ——— (attorney docket no. 10519/22; MD-54), which is being filed on the same day as the present application and is hereby incorporated by reference. In addition to providing an input to the mode register 430, the same or another temperature control circuit can be used to implement

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the thermal cut-off techniques described in the above-referenced patent application to protect the

memory array 400 from functionality failure at high temperature.